



# *ENDANGERED SPECIES PROTECTION*

Presentation to the Pesticide Program Dialogue Committee  
October 29, 2003



# *ESA Overview*

- Applies to all federal agencies
- Imposes procedural and substantive obligations on federal agencies



## *ESA Section 7 (a)(1)*

- Sec. 7(a)(1)
  - Directs all Federal agencies to use their authorities to further the purposes of the ESA by developing programs for the conservation of listed species



## *ESA Section 7(a)(2)*

- Sec. 7(a)(2)
  - Ensure Agency actions are not likely to jeopardize listed species by reducing numbers, distribution, or reproduction
  - Ensure Agency actions are not likely to destroy or adversely modify designated critical habitat



## *ESA Section 7(d)*

- Sec. 7(d) – While in consultation  
..... “shall not make any irreversible  
or irretrievable commitment of  
resources... which has the effect of  
foreclosing the formulation or  
implementation of any reasonable  
and prudent alternative  
measures...”



# *ESA Consultation*

- No consultation if “no effect”
- Consultation required if “may affect”
  - Informal consultation
  - Formal consultation



# *Informal Consultation*

- Optional process to assist the action agency in deciding whether formal consultation is necessary
- Used to identify ways to avoid adverse effects
- No prescribed time line
- Concludes with Services' concurrence that action will not adversely affect listed species or critical habitat



# *Formal Consultation*

- Required when adverse effects are likely
- Action agency prepares a description of the action and the effects to listed species
- Service assesses whether those effects, combined with the status of the species, the environmental baseline, and any cumulative effects, are likely to jeopardize the continued existence of any listed species or adversely modify critical habitat





## *Formal Consultation (cont.)*

- If jeopardy/adverse modification is likely, Services coordinate with the action agency to develop a Reasonable and Prudent Alternative that would avoid jeopardy/adverse modification
- When appropriate, Services include an incidental take exemption
- The biological opinion is to be issued within 135 days of start of consultation but extensions may be granted



## *Role of USDA*

- USDA has interest in EPA's program and result of consultation on pesticides
- Can assist in refining determinations by providing cropping and pesticide use information



## *What does this Mean for OPP?*

- OPP must assure that any outdoor use pesticides will not violate the ESA
- Eco-risk assessments are integral part of registration decisions under FIFRA.
- Using these as screen, OPP must focus the assessment to address specific listed species



# *Ongoing Issues and Activities*

- Litigation
- Internal process enhancement
- Advance Notice of Proposed Rulemaking
- Clarification of technical and scientific approaches
- Data needs
- Implementation



# *Litigation*

- CATs - consent decree
- WTC - court ordered schedule/interim measures
- NRDC – Atrazine
- CBD – California Red-Legged Frog
- Defenders of Wildlife - Fenthion
- SOSA – Barton springs salamander – Notice of Intent to Sue



# *Internal Process Development*

- Split between screening level assessment and species specific assessment
- How to address ESA responsibilities within existing processes of registration and reregistration

# *Advance Notice of Proposed Rulemaking*

- February '03 government issued ANPR on Counterpart Regulations
- Various approaches for a more effective and efficient process
- Varied comments from virtually all types of interested parties



## *ANPR (cont.)*

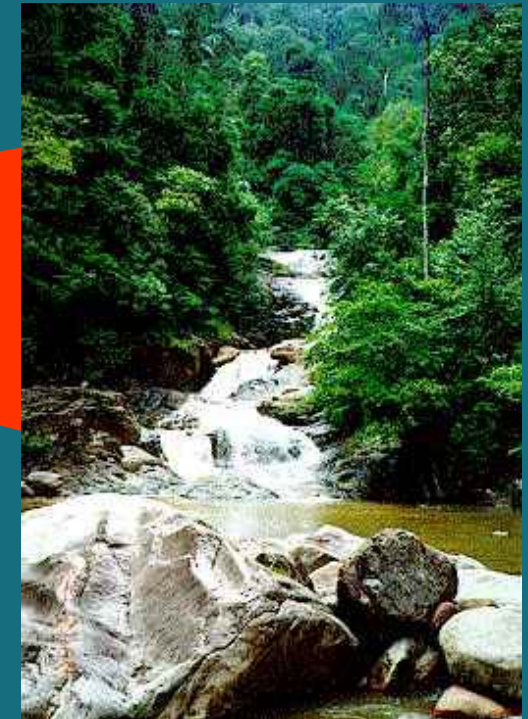
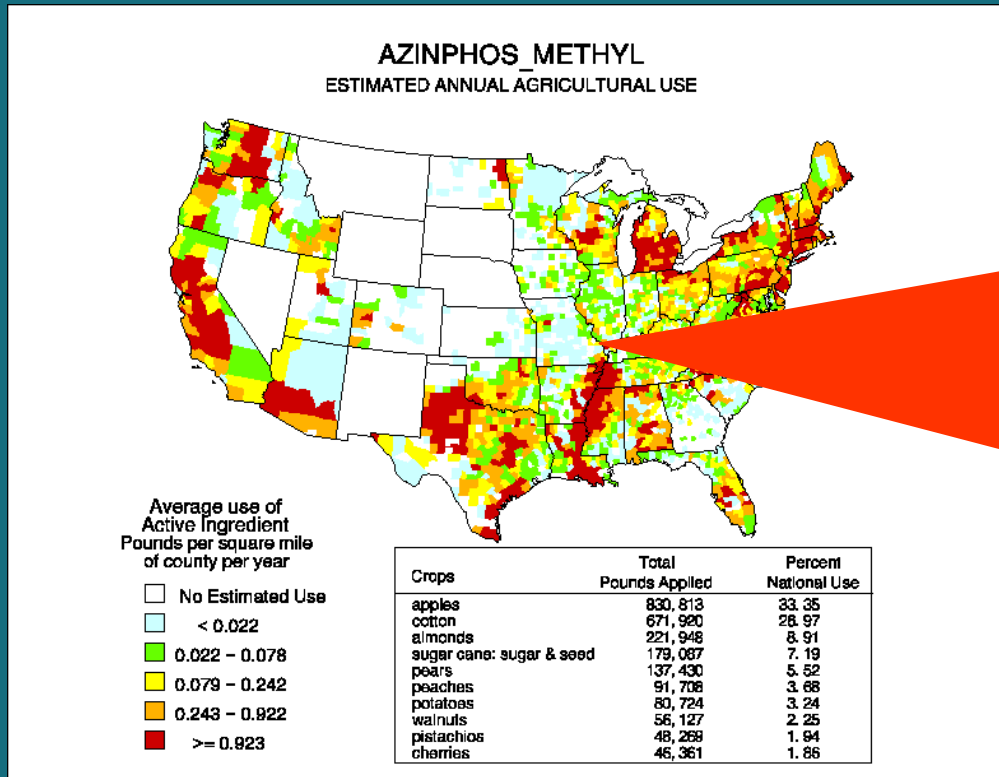
- EPA, NOAA Fisheries, Fish and Wildlife Service and Department of Agriculture
  - Working through the comments
  - Discussing public participation in the consultation process
  - Clarifying technical and scientific approaches



# *Risk Assessment Processes*

## The Screening-Level Process Universe

## Species-Specific Universe



# *Nature of the Screening Level Process*

- Same exposure and effects analyses as for non-endangered species
- Evaluation criteria (e.g. levels of concern, or LOCs) are more conservative than for non-endangered species
- Screen is not intended to be specific to individual species



# *Screening Level Exposure*

- Not tied to individual species' location
- Assumes an endangered species is present on or near application site
- Aquatic exposures based on surface water models; may include monitoring data; upper-bound exposure conditions
- Terrestrial exposures based on dietary exposure and pesticide residues



# *Screening Level Effects*

- Conducted like non-endangered species
- Usually no data for endangered species per se
- Based on toxicity endpoints from most sensitive species tested within broad taxonomic groups:
  - Birds
  - Mammals
  - Fish
  - Aquatic Invertebrates
  - Plants
- Typical endpoints relate to acute mortality and reproduction/growth effects



# *Risk Characterization*

- Exposure and Effects are integrated by standard Risk Quotient (RQ) calculations
- RQs are compared with LOCs to determine if there is a **potential** concern for effects on endangered species



# *Strengths of the Screen*

- Screen uses same conservative assumption as assessment for non-endangered species
- Screen Indicates the potential for adverse effects, **IF** exposure occurs
- Focuses further effort where it is needed, to make species specific refinements



# *Species Specific Refinements*

- Toxicity information is generally used as provided by the Screening Level Assessment
- Exposure information is refined



# *Initial Proximity Determination*

- Identify specific species within taxonomic group(s) of concern
- Determine in what counties the species are found
- Determine whether labeled uses are likely to occur in each county





# *Models and Uses*

- Determine whether exposure scenario used to estimate risk at a national level, is appropriate to this geographic area
- Determine whether specific use instructions on the label would preclude exposure at levels of concern



# *Geography and Biology*

- Determine whether geography limits the production of a particular crop or would limit the movement of a listed species
- Determine whether species biology or habits would change the exposure pattern



# *Result of Refinement*

## ■ Determinations

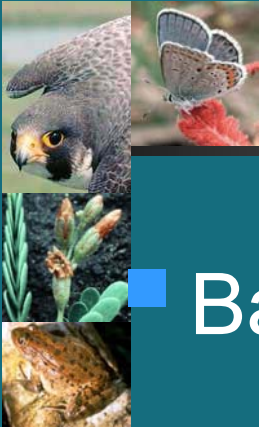
- No Effects – no consultation required  
(no exposure of concern)
- May Affect – consultation required
  - Not Likely to Adversely Affect - informal  
(Exposure may occur and may be at levels of concern)
  - Likely to Affect – formal  
(Exposure likely to occur at levels of concern)



# *Characterization of Risk*

- Information that may be used
  - Incident data
  - Sales and use information
  - Local use practices
  - Monitored levels in the environment

# *Information Needs for Registration*



## ■ Baseline screening level risk assessment:

- Compare Risk Quotient (RQ) values to pre-determined levels of concerns (LOCs).
- If LOC is exceeded for a class of non-target organisms, there may be a potential to affect one or more listed species.

# *Information Needs for Registration (cont.)*

- Overlap of species ranges with potential use areas and application timing
  - Services FR Notices provide information on range and habitat
  - More specific information from private entities (e.g., Natureserve)
  - Cite data (e.g., FIFRA Endangered Species Task Force – FESTF)

# *Information Needs for Registration (cont.)*

- Propose risk mitigation
  - Timing of applications
  - Application rates
  - Buffer areas
  - Off-labeling of specific geographic areas



# *Implementation*

- Proposed FR Notice December 2002
- Final FR Notice under development





# *Implementation Proposal*

- Products requiring use modifications would be labeled with generic statement
- County-level Bulletins to depict geographic area, pesticide, use limitations
- Use limitations would be enforceable under FIFRA

# *Overall Implications for Pesticide Decisions*

- Incorporate refinements in registration and reregistration decisions
- Decisions will need to address ES issues or move into consultation
- Products may be required to carry label statements referring to County Bulletins



## *Panel Members*

- Bridget Moran – Washington State Department of Agriculture
- Beth Carroll - Syngenta
- Patti Bright – American Bird Conservancy
- Rebeckah Freeman – American Farm Bureau Federation



# *Questions for the Panel*

1. Given the fast pace of decisions under consent decrees and court orders, how can EPA more effectively communicate and interact with you about our determinations



## *Questions for the Panel*

2. In the longer term program, what can you or similar organizations contribute to make the program more effective and successful?